

Work Order ID 127896

December-17-14 1:59:37 PM

127896

Page 1

Item ID: 647.3912

Revision ID:

Item Name: Lower Deflector

Start Date: 12/17/14 Start Qty: 10.00

Required Date: 12/17/14 Req'd Qty: 10.00

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals:

Process Plan: ML5

Date: 11-12-19

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.3900	C

100

0.00

100

BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut Blank at 20.000"

*** ONE BLANK MAKES TWO PARTS***

5 0 15-01-21
DAS 20 9-89

110

0.00

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine per folio FB309

DWG REV: C

FOLIO REV: AA

2- deburr and break all sharp edges

10 0 15/01/22
DAS 44 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Work Order ID 127896

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Item ID: 647.3912 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Lower Deflector
 Start Date: 12/17/14 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 12/17/14 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC2- Inspect parts off machine FAI/FAIB	0.00				10	0		DAS 44 15/01/22 9-89
120									
QC	Memo	0.00							
Quality Control									
130	QC8- Inspect parts - second check	0.00				10	0		DAS 14 15/01/22 9-89
130									
QC	Memo	0.00							
Quality Control									
140	Outsource process-Anodize per QSI017 4.1.10.1	0.00							
140									
Outsource4	Memo	0.00							
Outsource process - Anodize	Issue P/O to ATG : 27209								
	1- Black Anodize as per Dwg 647.3900								
	2- PRIME AS PER DWG, SEE NOTE #9								
	Certification of Conformity is required								

C215101/26 10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread	☐ Pressure/Forced
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set	☐ Set-up
☐ Turning Sequence	☐ Finish	☐ Out of Calibration	☐ Temperature/Cure
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence	☐ Weld
			☐ Wrong Stock Pulled
			☐ Other

Work Order ID 127896

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 Item Name: Lower Deflector
 Start Date: 12/17/14 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 12/17/14 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Receive & Inspect for Damage & Mat'l Certs	0.00							
150									
Packaging	Memo	0.00							
Packaging									
155	QC5- Inspect part completeness to step on W/O	0.00							
155									
QC	Memo	0.00							
Quality Control									
180	Identify as per dwg & Stock Location <i>mt</i>	0.00							
180									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								

10X 8015-02-4

(10) **DAS 38 9-89**
FEB 09 2015

0 **DAS 27 9-89**
FEB 09 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 127896***127896***

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Start Date: 12/17/14 Start Qty: 10.00 ***10*** Cust Item ID:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

15/2/10
MF
15-2-9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

December-17-14 1:59:36 PM

Page 1

Work Order ID: 127896

127896

Parent Item: 647.3912

647.3912

Parent Item Name: Lower Deflector

Start Date: 12/17/14

Required Date: 12/17/14

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV.A NEW ISSUE JFS 14/05/29 VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6B0.375X6.000 /		Purchased	No			100	f	36.0000	0.834	9			
										**	8.417'	DAS 20 9-89	15-01-21
M7075T6B0.375X6.000													
7075-T6 Plate 0.375" X 6.000", QQ-A 250/12													

Location

Loc Qty

Loc Code

MAT005

36

M127539

2

M130175

34

8.417'

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

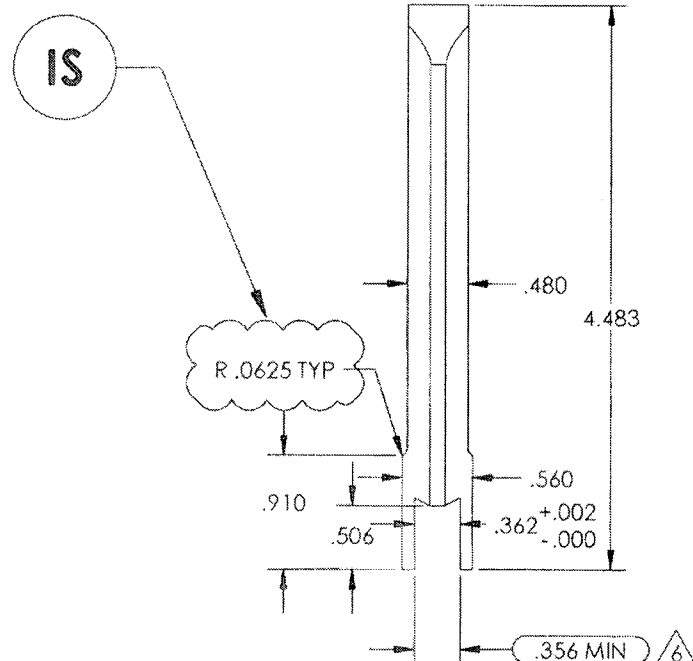
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Training									
Transport									
Unapproved									

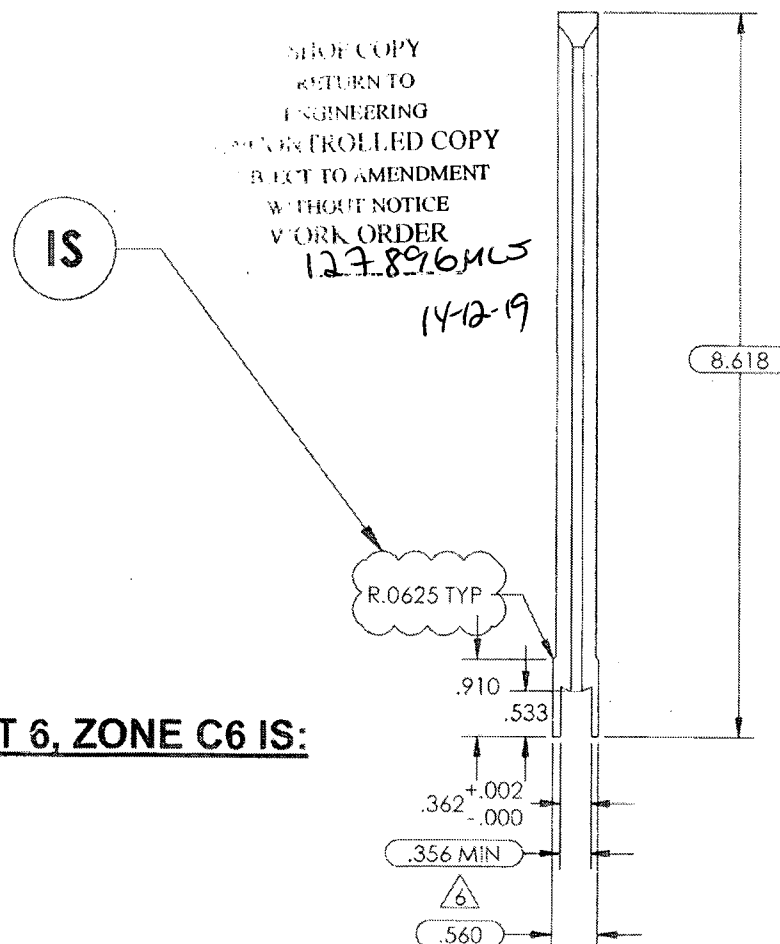
FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 04556			SHEET 1 OF 1	
	DWG NO. 647.3900	REV: C	PREPARED BY D. MEJIA	DATE: 06/10/2014	EFFECT ON DWG ☐ INC. ☒ UNINC.
	DWG TITLE: DEFLECTORS				
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF. NEXT ORDER	
TRANSACTION CODES (TC): A-ADD R-REVISE C-CREATE D-DELETE	REASON: DIMENSION CHANGE				ECR: D-14-04



SHEET 5, ZONE C6 IS:



SHEET 6, ZONE C6 IS:

DOCUMENTS EFFECTED:	☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM	CHANGE CATEGORY	DER REVIEW REQUIRED
		☐ MAJOR ☒ MINOR	☐ YES ☒ NO

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES AND REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377 J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377 J, TYPE I, CLASS N; 1-2 MIL MAX.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	INITIAL RELEASE	07/15/09	P. BRAYO
2	INCORPORATED CHANGES: MPP & DIMS	07/24/12	P. BRAYO
3	INCORPORATED ECN(S)	10/22/13	P. BRAYO
4	INCORPORATED ECN(S)	11/01/13	P. BRAYO

UNINCORPORATED ECN(S)

04556

6			12	601.3072	RIVET	CR9213-6-P	
2			11	647.3917	DOUBLER		
1			10	647.3916	DEFLECTOR, UPPER HALF	△	△
1			9	647.3915	DEFLECTOR, LOWER HALF	△	△
1	1		8	647.3914	BREAKAWAY TIP LONG	△	△△
		1	7	647.3913	BREAKAWAY TIP MEDIUM	△	△△
	1	1	6	647.3912	LOWER DEFLECTOR	△	△△
			5	647.3911	212 UPPER DEFLECTOR	△	△△
			4	647.3910	412 UPPER DEFLECTOR	△	△△
A/R	A/R	A/R	3	601.2045	RIV, LOCITE 598		△
	3	2	2	601.3074	RIVET	MS30470AD #12	
			1		DELETED		
X				647.3903	DEFLECTOR ASSY		△
	X			647.3902	LOWER DEFLECTOR ASSY		
		X		647.3901	LOWER DEFLECTOR ASSY		
					LOW		
.3903	.3902	.3901	FIND #	PART #	DESCRIPTION	MAT'L	SPEC
QTY							
NEXT ASSY (S)				PARTS LIST			
647.3800				APICAL INDUSTRIES			
				2408 TEMPLE HEIGHTS DR.			
				OCEANSIDE, CA. 92036-3512 (760)724-5300			
				DEFLECTORS			
				847.3900			
				SCALE: NONE			
				SHEET 1 OF 12			

647.3901

647.3902

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.125 X 45.0° TYP

SECTION B-B

Ø .177 THRU 3PL

.266 X 17.9°

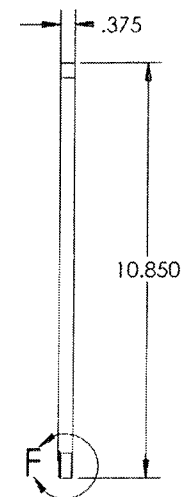
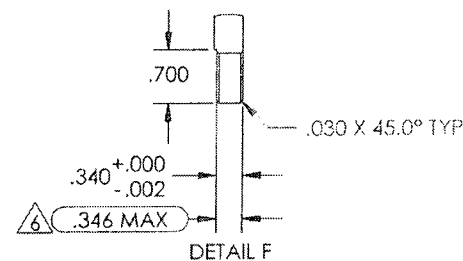
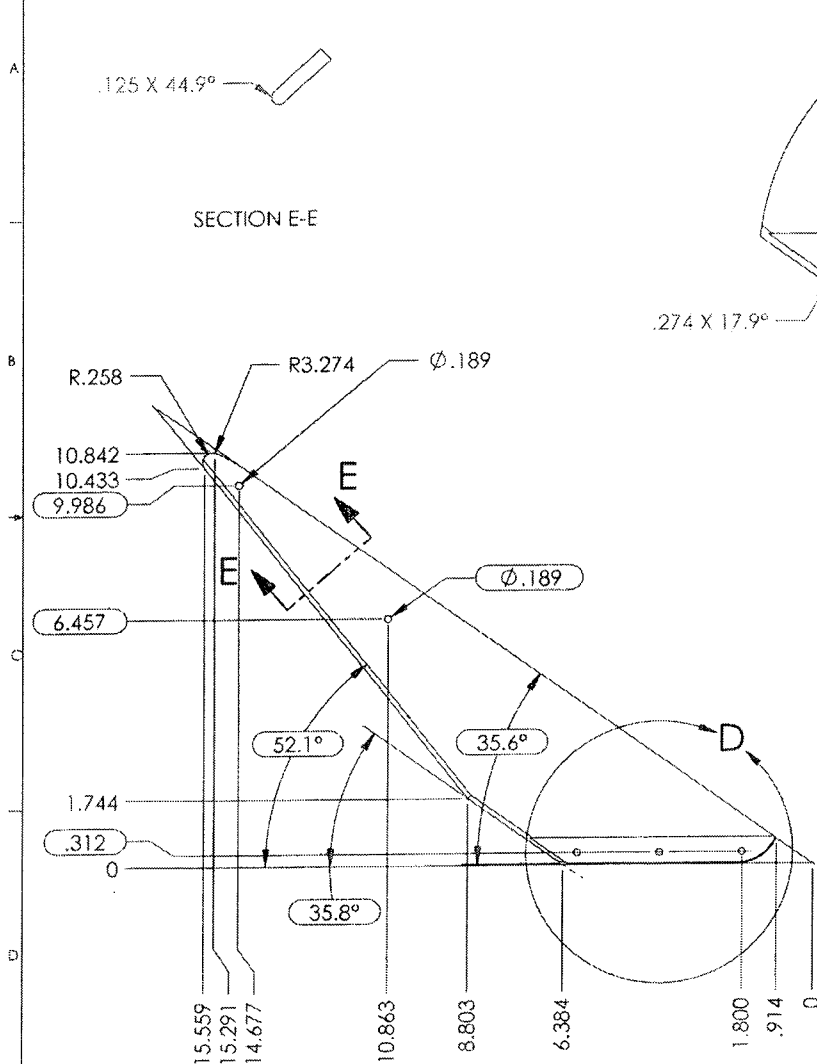
DETAIL A

DETAIL C

647.3911

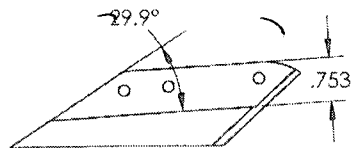
ORIGINAL DATE 10/26/2011 DRAWN BY J. BARNER CHECKED BY J. BARNER DRAWING APPROVAL J. BARNER CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 1 PLACE DECIMALS ±.001		SHEET 2 OF 12	REV. C

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES AND REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

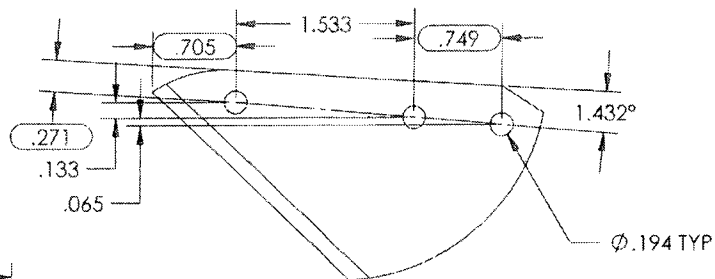


ORIGINAL DATE: 08-15-88 DRAWN BY: [blank] CHECKED BY: [blank] DIMENSIONS APPROVED BY: [blank] CONTRACT NO.: [blank]		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.015 2 PLACE DECIMALS ±.005 3 PLACE DECIMALS ±.001		SHEET: 3 OF 12 SCALE: NONE	REV: C QTY: 647.3900 DATE: 07/24/86

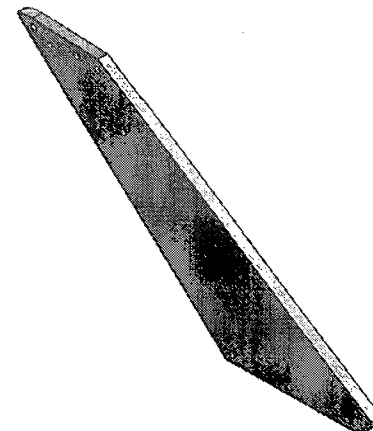
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



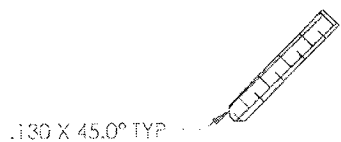
SECTION L-L



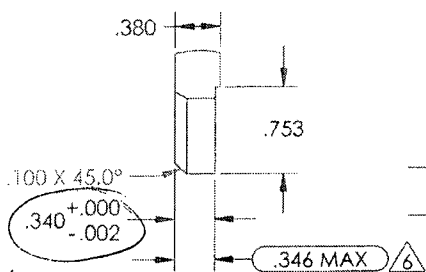
DETAIL H



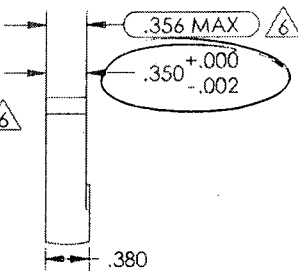
647.3912



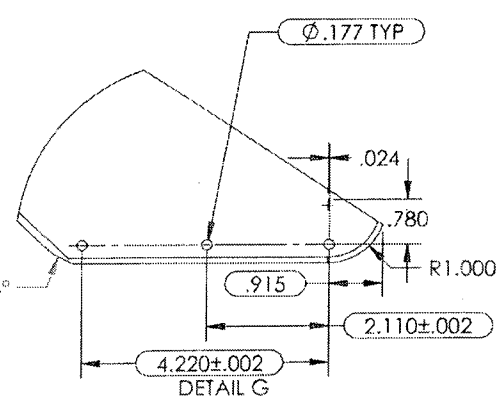
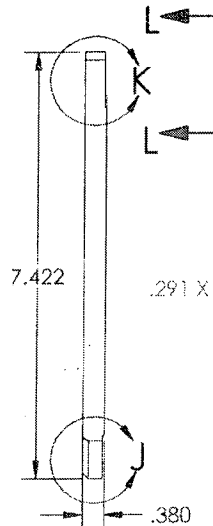
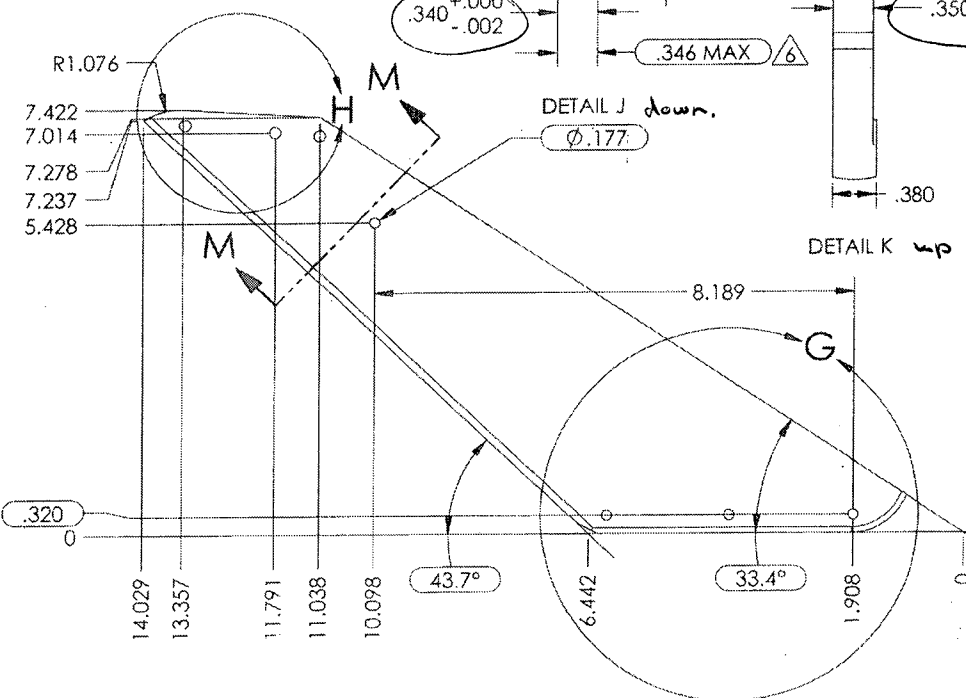
SECTION M-M



DETAIL J down.



DETAIL K up



ORIGINAL DATE 09-10-07		APICAL INDUSTRIES	
DRAWN BY	DESIGNED BY	2608 TEMPLE HEIGHTS DR.	
CHECKED BY	DETAILED BY	OCEANSIDE, CA 92056-3512 (760)724-5300	
DRAWN AND REVISED		DEFLECTORS	
P. BRAND		647.3900	
CHECKED BY		SCALE NONE	
UNLESS OTHERWISE SPECIFIED		DATE 07/26/06	REV C
DIMENSIONS ARE IN INCHES		DWG NO.	SHEET 4 OF 12
TOLERANCES ARE:			
FRACTIONS DECIMALS			
FRACTIONS DECIMALS			
FRACTIONS DECIMALS			

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES AND REPRODUCING IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

.180 X 45.0° TYP

SECTION N-N

R.269

R3.534

SECTION AD-AD

4.483

3.696

Ø .189 THRU 2PL

Ø .194 THRU 2PL

1.196

.506

.337

0

R.264

0

N

N

41.9°

31.4°

8.007

7.749

7.036

6.618

4.029

3.414

3.284

1.780

3.376

.917

1.504

3.135

.130

R1.675

.417

647.3913

4.483

AD

.560

.362^{+0.002}_{-0.000}

AD

.356 MIN

6

ORIGINAL DATE
(DATE)
DRAWN BY
(NAME)
CHECKED
(NAME)
DRAWING APPROVAL
(NAME)
BY
(NAME)
DATE
(DATE)

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

SEE CAGE CODE
8 07/02
DWG. NO. 647.3900
SCALE NONE
REV. C
SHEET 5 OF 12

1 2 3 4 5 6 7 8

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN WHOLE OR PART WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

.175 X 45.0° TYP

SECTION T-T

R.267

8.611

7.876

R3.354

T

T

3.072

.740

.306

1.556

2.306

3.068

.931

R1.671

.418

SECTION AB-AB

42.83°

37.1°

3.875

3.129

3.123

.824

0

12.148

11.192

10.597

1.224

.533

.252

0

Ø .189 THRU 2PL

Ø .194 THRU 3PL

R.050 TYP

.910

.533

.362^{+0.002}_{-0.000}

.356 MIN

6

.560

AB

AB

8.618

647.3914

CHECKED DATE: 11/10/11
DESIGNED BY: J. L. LEE
DRAWN BY: J. L. LEE
APPROVED BY: J. L. LEE
DATE: 11/10/11

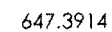
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS ARE
2 PLACE DECIMALS AND
3 PLACE DECIMALS 250
NOTES: 1. 3'

APICAL INDUSTRIES
2808 TEMPLE HEIGHTS DR.
OCEANSIDE, CA 92056-3512 (760)724-5300

DEFLECTORS

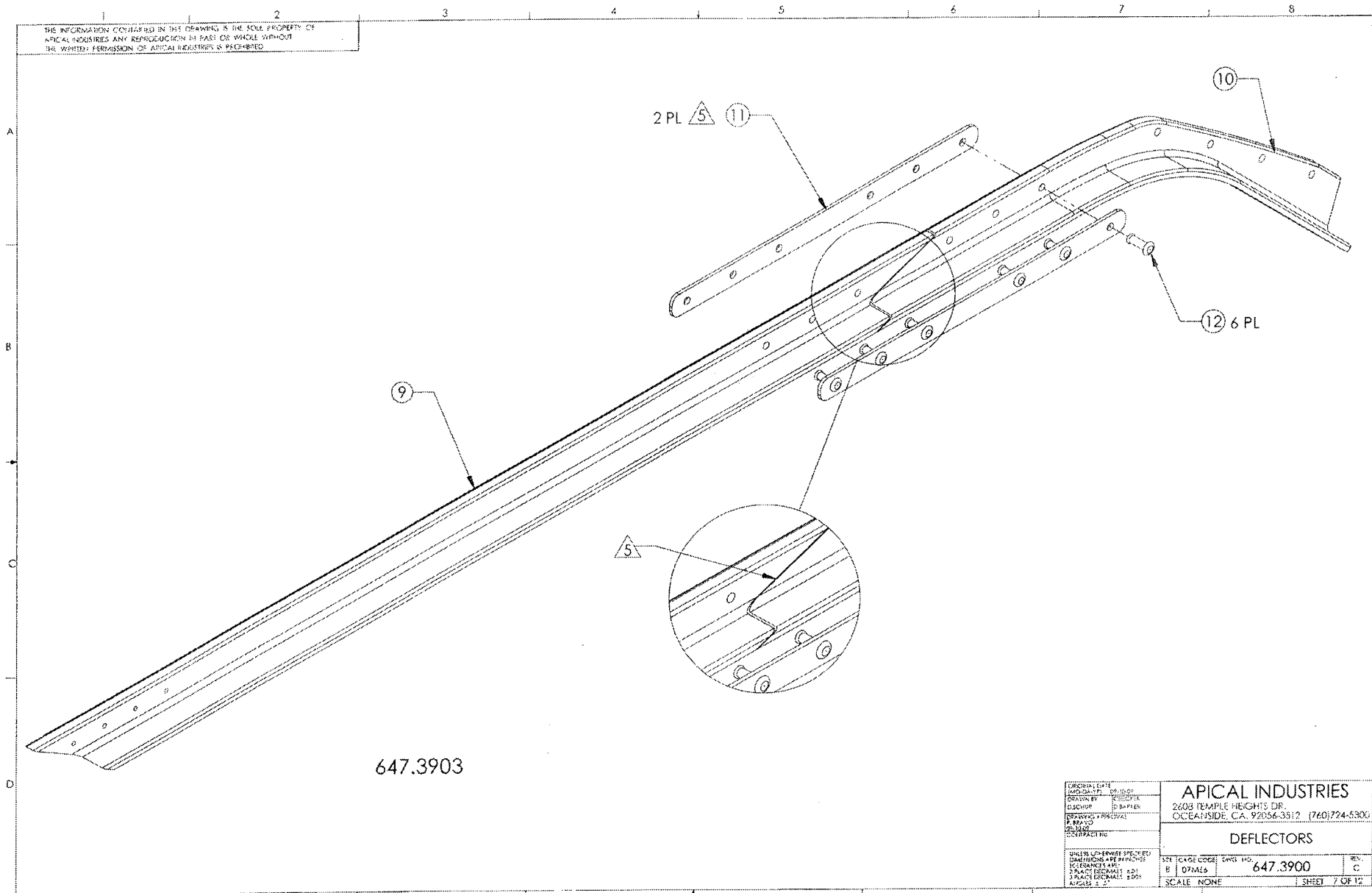
SCALE: NONE

SHEET 6 OF 12



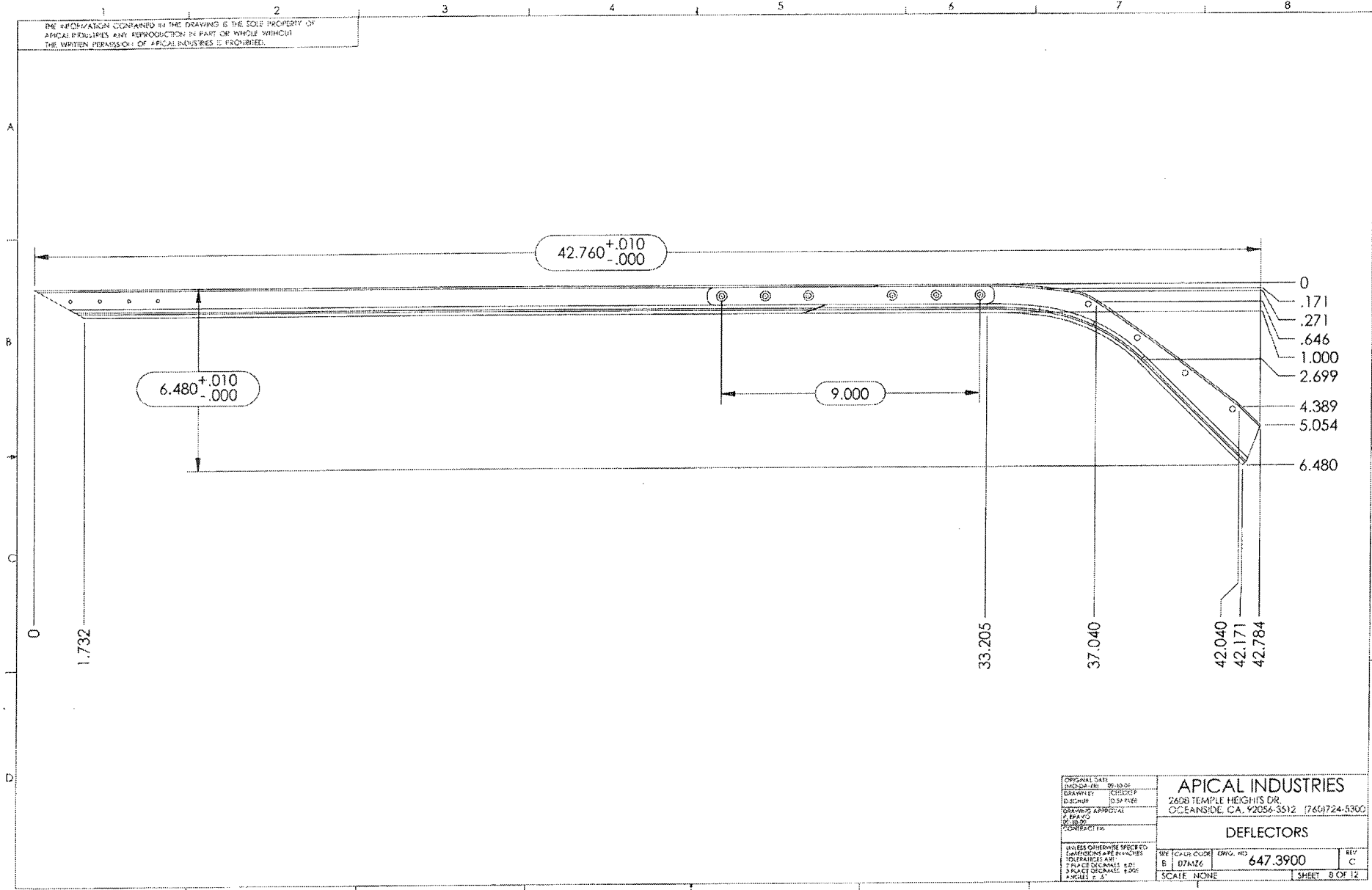
COMPANY DATE DWG. DATE: 06-26-07 DRAWN BY: JAMES CHECKED BY: JAMES DESIGNED BY: JAMES P. REVISION 06-26-07 CUSTOMER NO.	APICAL INDUSTRIES 2605 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5301
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES 1. FINISHES ARE: 2. PLACES SHOWN ARE: 3. PLACES SHOWN ARE: 4. PLACES SHOWN ARE:	DEFLECTORS SET / SCALE CODE TYPE: 1-2 R 07M16 647.3900 REV. C SCALE: NONE SHEET 6 OF 12

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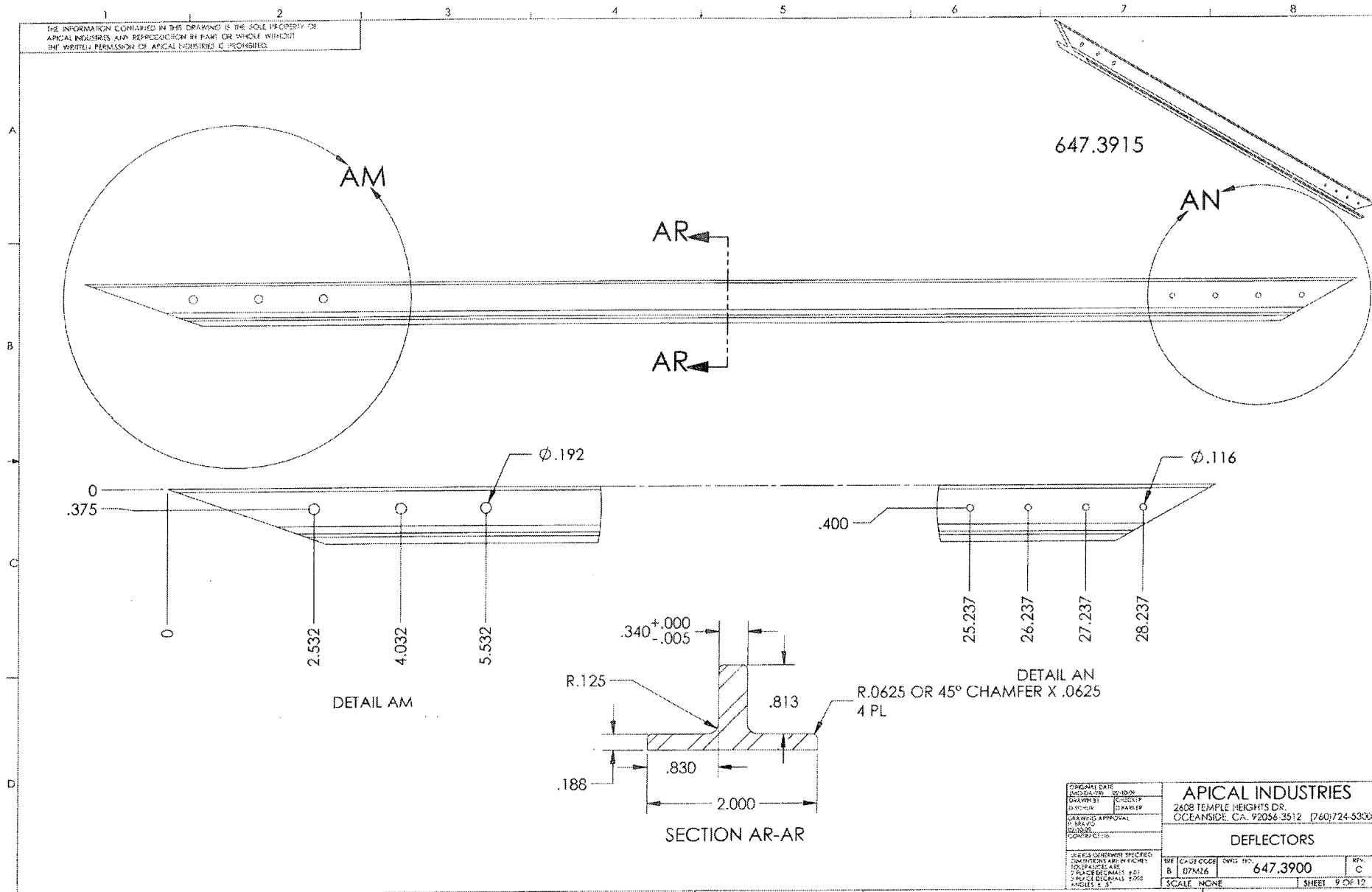
ORIGINAL DATE APPROVAL DATE DESIGNER DRAWING # P. NO. SUBMIT CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACES DECIMALS ±.01 3 PLACES DECIMALS ±.001 ALL DIMS. ±.01		SIZE / CASE CODE B / 07MALS	QWTS. NO. 647.3900
SCALE: NONE		SHEET 7 OF 12	

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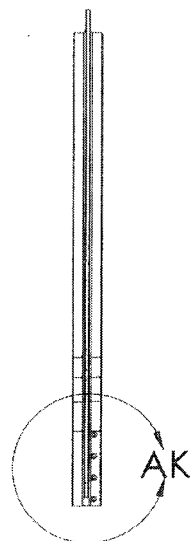


ORIGINAL DATA DESIGNED BY: 09-10-06 DRAWN BY: 03-10-07 CHECKED BY: 03-10-08 DRAWING APPROVAL: 03-10-09 CONTRACTOR:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: FINISH DECIMALS: ±.01 FINISH DECIMALS: ±.005 FINISH DECIMALS: ±.002		REV: 07/12/06 SCALE: NONE	REV: 07/12/06 SCALE: NONE
DEFLECTORS		647.3900	SHEET 8 OF 12

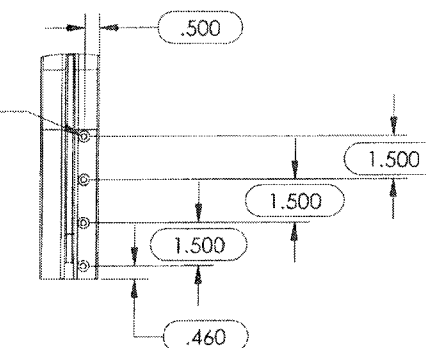
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4X $\varnothing .196 \pm .010$ THRU ALL
✓ $\varnothing .385 \pm .020 \times 100^\circ \pm 1.000^\circ$



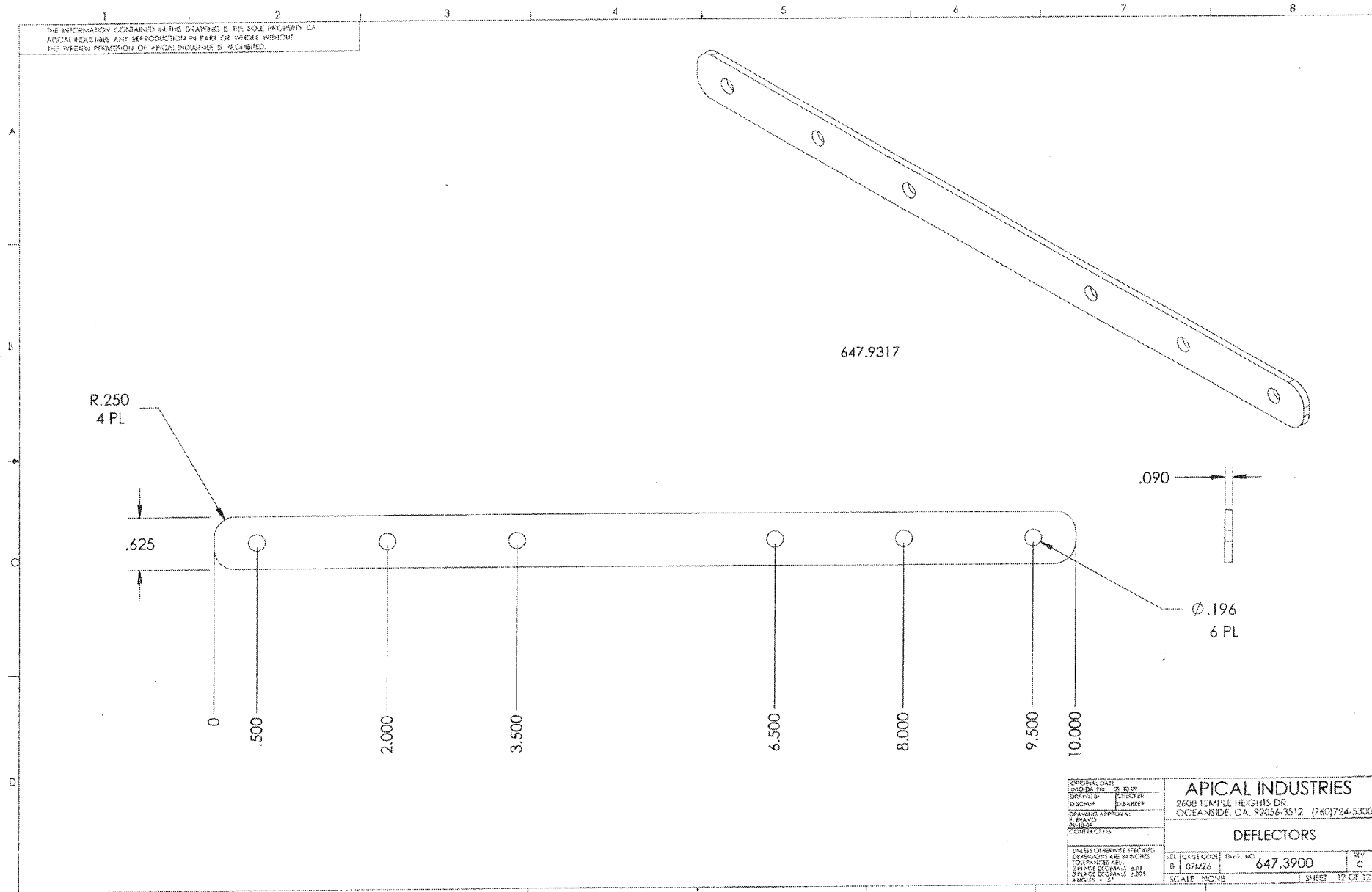
DETAIL AK

647.3915

DESIGNED BY	APICAL INDUSTRIES
DRAWN BY	2608 TEMPLE HEIGHTS DR.
CHECKED BY	OCEANSIDE, CA. 92056-3512 (760) 724-5300
DATE	07/1/22
SCALE	NONE
SHEET	10 OF 12

[illegible]

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO27209

Purchase Order Date 1/26/2015

PO Print Date 1/28/2015

Page Number 2 of 3

Order From :

VC-ATG001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

ATG INDUSTRIES INC.
31 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Contact Name

Vendor Phone

613-446-4544

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

FCA - (Free Carrier)

QTY

646.9811 UPPER
DEFLECTOR REV. A

2/4/2015

10.00

\$18.15

Yes

2/4/2015

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2
PRIME: AS PER IAW MIL-P-23377J TYPE I, CLASS N

Line Total:

\$18.15

QTY

646.9812 LOWER
CUTTER DEFLECTOR
REV. A

2/4/2015

10.00

\$11.45

Yes

2/4/2015

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2
PRIME: AS PER IAW MIL-P-23377J TYPE I, CLASS N

Line Total:

\$11.45

QTY

647.3912 LOWER
DEFLECTOR REV. C

2/4/2015

10.00

\$11.45

Yes

2/4/2015

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2
PRIME: AS PER IAW MIL-P-23377J TYPE I, CLASS N

Note:

1/28/2015

SP15-024



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 63505

Date: 03-Feb-15

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
5 ea	Part: D4970-3 WINDSHIELD DEFLECTOR HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 Job: 20150094 PO: PO27209	Rev: C	Line:
10 ea	Part: 646.9811 UPPER DEFLECTOR HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150095 PO: PO27209	Rev: A	Line:
10 ea	Part: 646.9812 CUTTER DEFLECTOR HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150096 PO: PO27209	Rev: A	Line:
10 ea	Part: 647.3912 LOWER DEFLECTOR HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150097 PO: PO27209	Rev: C	Line:
Certificate of Conformance			

SP15-02-4

Samia P. [Signature]



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 63505

Date: 03-Feb-15

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity		Description	
		A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.	
		ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY	
		DATE : <u>3/2/15</u>	
		CERTIFIED SIGNATURE : <u></u>	
		RECEIVER SIGNATURE : _____	